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Amendments to the Drawing Figures:

The attached drawing sheets include proposed changes to FIGs. 1-3 and replace the original sheets including FIGs. 1-3.

Attachment: Replacement Sheets

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REMARKS/DISCUSSION OF ISSUES

By this Amendment, Applicant amends claims 12, 14, 16, 18, 20 and 22, and adds claims 24-29. Accordingly, claims 12-29 are pending in the application.

Reexamination and reconsideration are respectfully requested in view of the following remarks.

OBJECTION TO THE DRAWINGS

Applicant hereby amends the drawings to label the various functional blocks shown therein.

Accordingly, Applicant respectfully requests that the objection to the Drawings be withdrawn, and that the Examiner acknowledge that the amended Drawings are accepted.

35 U.S.C. § 102

The Office Action rejects claims 12-23 under 35 U.S.C. § 102 over Kawano et al. U.S. Patent 5,774,797 ("Kawano").

Applicant respectfully traverses those rejections for at least the following reasons.

Claim 12

Among other things, the communication system of claim 12 includes a communication device having: (1) an amplifier outputting an RF signal having a frequency; and (2) a DC/DC converter that receives a control input value to provide a voltage to the amplifier to vary a power of the RF signal, where the control input value is exclusively controlled in dependence of the RF signal's frequency to vary the voltage provided to the amplifier.

Applicant respectfully submits that Kawano does not disclose any system including such a combination of features.

In particular, Applicant respectfully submits that Kawano completely fails to disclose any DC/DC converter that receives a control input value to provide a voltage to the amplifier to vary a power of the RF signal, where the control input value is

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exclusively controlled in dependence of the amplifier frequency to vary the voltage provided to the amplifier.

The Office Action cites FIG. 7 of Kawano as supposedly showing the DC/DC converter, and cites the text at col. 8, lines 1-4 and col. 89, lines 1-20 in support.

Applicant agrees that FIG. 7 of Kawano shows a DC/DC converter 123, but respectfully submits that it absolutely does NOT show the DC/DC converter recited in claim 12.

Again, the DC/DC converter recited in claim 12 receives a control input value to provide a voltage to the amplifier to vary a power of the RF signal, where the control input value is exclusively controlled in dependence of the amplifier frequency to vary the voltage provided to the amplifier.

Very clearly, the DC/DC converter 123 of Kawano does not receive any control input value that is exclusively controlled in dependence of the RF signal's frequency. Indeed, the very text cited by the Examiner proves this to be the case conclusively. Kawano at col. 8, lines 1-5 teaches:

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the level by interpreting a command from a communications base station. The variable negative-voltage generator 120 provides the PA module 132 with a gate voltage VG which is derived from the measured supply voltage and internal temperature.

Kawano could not more plainly state that the control voltage for the negative-voltage generator 120, which includes the DC/DC converter 123, is "derived from the measured supply voltage and internal temperature." Therefore, it is completely impossible for the control input value to be "exclusively controlled in dependence of the RF signal's frequency" as in the system of claim 12.

This has already been explained to the Examiner before, although perhaps not in such clear and explicit terms.

Thus, the Advisory Action dated 16 October 2006 states:

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"It should be noted that the radio frequency transmission signal as mentioned by Kawano is a filtered-modulated TDMA transmission signal and the control input voltage and power values for adjusting the power and voltage levels are dependent upon the transmission signal. It is also noted that a power amplifier need (sic) to adjust or vary its power and voltage depending on a signal to transmit (frequency value). Without a signal to transmit, the PA does not need to adjust its voltage of power. Therefore, Kawano, indeed, teaches "control input value of which is controlled in dependence of said frequency value" (sic) (the filtered-modulated TDMA transmission signal) to vary an electrical supply of the amplifier."

(emphasis added).

Applicant respectfully submits that this above-quoted text from the Advisory Action is wrong on many different levels.

First off, the Examiner has completely misquoted and mischaracterized Applicant's claim. Prior to this Amendment, claim 12 did not recite "control input value of which is controlled in dependence of said frequency value" but instead very clearly recited "control input value of which is exclusively controlled in dependence of said frequency value." It is totally improper for the Examiner to just ignore a word that is plainly included in Applicant's claim, and thereby misquote and mischaracterize the claim.

As amended, the claim recites "wherein the control input value applied to the DC/DC converter is exclusively controlled in dependence of said frequency." As explained above, the very text at col. 8, lines 1-5 of Kawano that is cited by the Examiner shows that the control input value provided to DC/DC converter 123 in Kawano is absolutely not exclusively controlled in dependence of the frequency of the RF amplifier output signal.

Furthermore, the above-cited text from the Advisory Action apparently

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attempts to equate a "signal to transmit" (or "the filtered-modulated TDMA transmission signal") with a "frequency value." This is plainly wrong. A signal HAS a frequency or frequency value, but a signal is not a frequency or frequency value in and of itself. Anyone of even rudimentary skill in the art understands this distinction.

Also, the statement: "*It is also noted that a power amplifier need (sic) to adjust or vary its power and voltage depending on a signal to transmit (frequency value)*" makes no sense in the contexts of Applicant's claim and Kawano. Applicant has not specifically claimed, and Kawano has not described, any power amplifier that adjusts or varies its voltage. And even more specifically, Applicant has not specifically claimed, and Kawano has not described, any power amplifier that adjusts or varies its voltage "depending on a signal to transmit." The amplifier in Applicant's claim 12 does not "vary its voltage" - and neither does the amplifier disclosed by Kawano. A DC/DC converter varies a voltage supplied to an amplifier.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 12 is very clearly patentable over Kawano.

Claims 13-15

Claims 13-15 depend from claim 12, and are deemed patentable for at least the reasons set forth above with respect to claim 12.

Claim 16

Among other things, the communication device of claim 16 includes: (1) an amplifier outputting an RF signal having a frequency; and (2) a DC/DC converter that receives a control input value to provide a voltage to the amplifier to vary a power of the RF signal, where the control input value is exclusively controlled in dependence of the RF signal's frequency to vary the voltage provided to the amplifier.

As explained above with respect to claim 12, Kawano does not disclose any communication device including this combination of features.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 16 is very clearly patentable over Kawano.

Claims 17-19

Claims 17-19 depend from claim 16, and are deemed patentable for at least

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the reasons set forth above with respect to claim 16.

Claim 20

Among other things, the method of claim 20 includes varying a power of an RF output signal in dependence of the frequency of the RF output signal by controlling a DC/DC converter adapted to provide a voltage to the amplifier and having a control input adapted to receive a control input value, the control input value being exclusively controlled in dependence of the RF output signal's frequency to vary the voltage provided to the amplifier.

For similar reasons to those set forth above with respect to claim 12, Applicant respectfully submits that Kawano does not disclose any method including this combination of features.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 20 is very clearly patentable over Kawano.

Claims 21-23

Claims 21-23 depend from claim 20, and are deemed patentable for at least the reasons set forth above with respect to claim 20.

NEW CLAIMS 24-29

New claims 24-29 all depend variously from claims 12, 16 and 20 and are all deemed patentable for at least the reasons set forth above with respect to claims 12, 16 and 20, and for the following additional reasons.

Claims 24, 26 and 28 all include a feature wherein a capacitor is connected between a line carrying the voltage to the amplifier, and ground. Applicant sees no mention of any such feature in Kawano.

Claims 25, 27 and 29 all include a feature wherein the voltage provided from the DC/DC converter to the amplifier is fine-tuned in response to the output of the comparator. Applicant sees no mention of any such feature in Kawano.

CONCLUSION

In view of the foregoing explanations, Applicant respectfully requests that the

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Examiner reconsider and reexamine the present application, allow claims 12-29 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

If necessary, the Commissioner is hereby authorized in this reply to charge payment or credit any overpayment (except for the issue fee) to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

VOLENTINE & WHITT

Date: 30 March 2007

By: 
Kenneth D. Springer
Registration No. 39,843

VOLENTINE & WHITT
One Freedom Square
11951 Freedom Drive, Suite 1260
Reston, Virginia 20190
Telephone No.: (571) 283.0724
Facsimile No.: (571) 283.0740

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